

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) An image forming apparatus comprising:

an LED print head comprising an LED array ~~composed of~~ including a plurality of LED elements ~~whose lighting is controlled according to image data and a driving circuit for driving the plurality of LED elements;~~ and

an LED array controller for controlling driving of the LED print head,

wherein the image forming apparatus further comprises:

a selective-information data feeder for storing screen angles as information data corresponding to different sets of information on a plurality of screens as selective information inherent to the image forming apparatus and for feeding out information data corresponding to a selected item of the selective information, and

wherein the LED array controller comprises:

a characteristic data memory for storing a plurality of sets of characteristic data each relating to one of the plurality of LED elements; and

a driving current correction data calculator for reading out the characteristic data from the characteristic data memory while receiving the information data from the selective-information data feeder in order to calculate, based on the characteristic data and the information data, driving current correction data for each of the plurality of LED elements.

2. (Currently Amended) An image forming apparatus comprising:

an LED print head comprising an LED array ~~composed of~~ including a plurality of LED elements whose lighting is controlled according to image data and a driving circuit for driving the ~~plurality of~~ LED elements; and

an LED array controller for controlling driving of the LED print head,

wherein the image forming apparatus further comprises:

a selective-information data feeder for storing toner charging characteristics as information data corresponding to different sets of information on toners of a plurality of colors as selective information inherent to the image forming apparatus and for feeding out information data corresponding to a selected item of the selective information, and

wherein the LED array controller comprises:

a characteristic data memory for storing a plurality of sets of characteristic data each relating to one of the plurality of LED elements; and

a driving current correction data calculator for reading out the characteristic data from the characteristic data memory while receiving the information data from the selective-information data feeder in order to calculate, based on the characteristic data and the information data, driving current correction data for each of the plurality of LED elements; ~~and~~
~~a driving current correction data memory for reading out the driving current correction data from the driving current correction data calculator and for storing the driving current correction data thus read out.~~

3. (Currently Amended) An image forming apparatus as claimed in claim 1,
wherein ~~the different sets of selective information correspond to a plurality of screens with different characteristics~~ the LED array controller comprises:

a drive current correction data memory for reading out and storing the drive current correction data calculated by the drive current correction data calculator.

4. (Currently Amended) An image forming apparatus as claimed in claim 1 ~~2~~,
wherein ~~the different sets of selective information correspond to a plurality of toner colors~~ the LED array controller comprises:

a drive current correction data memory for reading out and storing the drive current correction data calculated by the drive current correction data calculator.

5. (Cancel)

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12. (Currently Amended) An image forming apparatus comprising:

an LED print head comprising an LED array ~~composed of~~ including a plurality of LED elements whose lighting is controlled according to image data and a driving circuit for driving the ~~plurality of~~ LED elements; and

an LED array controller for controlling driving of the LED print head,

wherein the image forming apparatus further comprises:

a paper image data feeder for reading an image formed by the image forming apparatus on a sheet of paper output therefrom in order to feed out paper image data representing a degree of density unevenness of the image, and

wherein the LED array controller comprises:

a characteristic data memory for storing a plurality of sets of characteristic data each relating to one of the plurality of LED elements;

a driving current correction data calculator for reading out the characteristic data from the characteristic data memory while receiving the paper image data from the paper image data feeder in order to calculate, based on the characteristic data, driving current correction data for each of the plurality of LED elements and increase or decrease the driving current correction data according to the paper image data.

13. (Original) An image forming apparatus as claimed in claim 12, wherein the paper image data feeder includes an image sensor for reading the image formed on the sheet of paper output from the image forming apparatus.

14. (Currently Amended) An image forming apparatus comprising:

an LED print head comprising an LED array composed of a plurality of LED elements whose lighting is controlled according to image data and a driving circuit for driving the ~~plurality of~~ LED elements; and

an LED array controller for controlling driving of the LED print head,

wherein the image forming apparatus further comprises:

a toner image data feeder for reading a toner image formed on an image-carrying member by the image forming apparatus in order to feed out toner image data representing a degree of density unevenness of the toner image, and

wherein the LED array controller comprises:

a characteristic data memory for storing a plurality of sets of characteristic data each relating to one of the plurality of LED elements;

a driving current correction data calculator for reading out the characteristic data from the characteristic data memory while receiving the toner image data from the toner image data feeder in order to calculate, based on the characteristic data, driving current correction data for each of the plurality of LED elements and increase or decrease the driving current correction data according to the toner image data.

15. (Original) An image forming apparatus as claimed in claim 14, wherein the image-carrying member is a photoconductor or a transport belt.

16. (Original) An image forming apparatus as claimed in claim 14, wherein the toner data feeder includes an image sensor for reading the toner image formed on the image-carrying member.

17. (Original) An image forming apparatus as claimed in claim 12, wherein the LED array controller further comprises a driving current correction data memory for reading out the driving current correction data calculated and increased or decreased by the driving current correction data calculator and for storing the driving current correction data thus read out.